CLAIMS

We claim:

- 1. A method of communicating with a virtual circuit network comprising: on a host computer communicatively linked with a virtual circuit network and
- communicatively linked with a device over a local area network, receiving a virtual circuit message from the virtual circuit network; referencing a data structure associating a virtual circuit of the virtual circuit network with the device; and based on the association, passing the virtual circuit message to the device over the local area network.

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2. The method of claim 1, wherein the data structure is a table containing an entry associating the virtual circuit with the device.

3. The method of claim 1, wherein the data structure is a table containing an entry associating the virtual circuit with the network address of the device.

- 4. The method of claim 1, wherein the device is a personal computer.
- 5. The method of claim 1, wherein the virtual circuit network is an asynchronous transfer mode network.
 - 6. The method of claim 1, further comprising: receiving a virtual circuit setup message from the device; determining the network address of the device;

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generating a call reference value; and making an entry in the data structure associating the virtual circuit with the network address of the device.

- 7. A computer-readable medium having stored thereon a data structure comprising: an association between a virtual circuit of a virtual circuit network, the association being usable by a proxy host communicatively linked with the network and communicatively linked with a device over a local area network, the association being usable by the proxy host to pass virtual circuit messages received from the virtual circuit network to the device.
 - 8. A computer system comprising a proxy host computer, the proxy host computer comprising a memory having stored therein programs comprising: a networking program for unwrapping a device message received from a virtual circuit network to extract a virtual circuit message; a call deflector program for determining an association between a device on a local area network and a virtual circuit of the virtual circuit network; and a packet switching program for passing the extracted virtual circuit message to the device over the local area network based on the determined association.
- 9. The computer system of claim 8, the stored programs further comprising a bus driver for unwrapping a bus-specific message to extract the device message, wherein the bus-specific message is received from an interface device connected to the virtual circuit network.

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- 10. The computer system of claim 8, wherein the virtual circuit network is an asynchronous transfer mode network and wherein the virtual circuit message is an asynchronous transfer mode cell.
- 11. The computer system of claim 8, wherein the networking program is network device interface specification layer having an asynchronous transfer mode miniport.
- 12. The computer system of claim 8, further comprising a plurality of devices communicatively linked to the proxy host over a local area network, wherein each of the plurality of devices comprises a memory having stored therein programs comprising: a networking program for unwrapping a virtual circuit message received from the proxy host to extract data and pass the data to an application program, wherein the application program provides the data to a user at the device.
- 13. A computer-readable medium having stored thereon computer executable instructions for performing steps comprising: on a host computer communicatively linked with a virtual circuit network and communicatively linked with a device over a local area network, receiving a virtual circuit message from the virtual circuit network; referencing a data structure associating a virtual circuit of the virtual circuit network with the device; and based on the association, passing the virtual circuit message to the device over the local area network.

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- 14. The computer-readable medium of claim 13, wherein the data structure is a table containing an entry associating the virtual circuit with the device.
- 15. The computer-readable medium of claim 13, wherein the data structure is a table containing an entry associating the virtual circuit with the network address of the device.
- 16. The computer-readable medium of claim 13, wherein the device is a personal computer.
 - 17. The computer-readable medium of claim 13, wherein the virtual circuit network is an asynchronous transfer mode network.
 - 18. The computer-readable medium of claim 13, having stored thereon further computer executable instructions for performing the steps comprising: receiving a virtual circuit setup message from the device; determining the network address of the device; generating a call reference value; and making an entry in the data structure the virtual circuit with the network address of the device.

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